

ship with this veteran naturalist denied by distance to most of the third and fourth generations.

I greatly regret that space will not permit me to present a fuller account of Doctor Uhler's useful and beautiful life. Mrs. Uhler tells me that he left a mass of manuscripts and correspondence, and it is greatly to be hoped that a lengthy account of his career may be published. The world does not seem to be making this type of man nowadays, and it is a pity.

L. O. HOWARD.

The Neotropical Tipulidae in the Hungarian National Museum (Diptera).—II.

By CHARLES P. ALEXANDER, Ithaca, N. Y.*

(Plate XVI.)

Tribe 2—ANTOCHINI.

Genus **Teucholabis** Osten Sacken.

1859. *Teucholabis* Osten Sacken; Proc. Acad. Nat. Sci. Phila.; p. 223.

Teucholabis is the dominant Antochine genus in the tropics of the New World. Many species were included in the collection and are considered in the following pages.

Teucholabis flavithorax Wiedemann.

Two specimens, ♂ ♀, from Callanga, Peru.

Teucholabis tristis, sp. n. (Pl. XVI, Fig. 1).

Head and thorax shining black; wings infused with brown; *Rs* long, only slightly arcuated.

Female.—Length, 5.6 mm.; wing, 6 mm.

Rostrum and palpi dark brown; antennæ dark brownish black; front, vertex and occiput dark shining black.

Thoracic dorsum shining black, the pronotum dull yellowish, this color continued caudad as a narrow stripe along the lateral margin of the præscutum to the wing root; pleuræ black. Halteres brown, knob yellow.

Legs, coxæ and trochanters brown, femora yellowish brown, the tip

*Contribution from the Entomological Laboratory, Cornell University.

broadly dark brown; tibiae and tarsi dark brown; the brown femoral apices are broadest on the fore femora, narrower on the hind femora.

Wings with a light brown suffusion; a little more hyaline in cells 1st *R*1, tip of cell *R* and in cell 1st *M*2; stigma dark brown, oval. Venation (see Plate xvi, fig. 1): *R*s long, almost straight; cell 1st *M*2 short; basal deflection of *Cu*1 at the fork of *M*.

Abdomen moderately long, dark brownish black.

Holotype, ♀, Callanga, Peru, in the Hungarian National Museum.

***Teucholabis fulgens*, sp. n.** (Pl. XVI, Fig. 2).

Head reddish; pronotum yellow; mesonotal præscutum reddish yellow with three dark spots; posterior coxæ similar in color to the other coxæ; wings hyaline with no dark brown basal spot, tip infuscated.

Female.—Length, 5 mm.; wing, 5.8 mm.

Rostrum and palpi brown; antennæ brown; front, vertex and occiput reddish.

Pronotum yellow. Mesonotal præscutum rich orange yellow, a small rounded, dark brown median spot near the cephalic margin; an oblong transverse mark of the same color on the caudal region of the præscutum; scutum yellow, the lobes more orange; scutellum light yellow; postnotum reddish orange. Pleuræ reddish orange, a rounded black spot midway between the root of the wings and the base of the halteres. Halteres brown, the knob orange yellow.

Legs, coxæ and trochanters reddish yellow, fore femora with the basal fifth yellow, remainder brownish black, tibiae and tarsi brownish black, middle and hind femora yellow with the tip broadly dark brown, tibiae dark brown, lightest medially, tarsi dark brownish black.

Wings subhyaline, tip slightly infuscated; a triangular brown stigma and a very narrow brown seam on the cord down to cell 1st *M*2. Venation (see Plate xvi, fig. 2): *R*s rather strongly arcuated, its origin slightly anterior to *Sc*2.

Abdomen with the six basal tergites dark brown, apical tergites and the valves of the ovipositor rich reddish yellow; sternites light reddish yellow.

Holotype, ♀, Callanga, Peru, in the Hungarian National Museum.

***Teucholabis jocos*a**, sp. n. (Pl. XVI, Fig. 3).

Head grey; pronotum inconspicuous, yellow; mesonotal præscutum reddish yellow with three dark spots; all coxæ reddish; wings hyaline with a pale brown rounded stigma.

Female.—Length, 5.2 mm.; wing, 5 mm.

Rostrum and palpi dark brownish black; antennæ dark brownish black; front, vertex and occiput grey.

Pronotum not conspicuous, dull yellow; præscutum orange medially, lighter colored, yellowish, on the sides, a brown median stripe broadest in front near the cephalic margin of the sclerite, becoming indistinct behind at about midlength of the sclerite, a rounded brownish black spot on the sides of the præscutum near the suture; scutum, scutellum and postnotum dull brownish yellow, not brightly colored. Pleuræ dull yellow. Halteres pale yellowish brown, knob and stem almost unicolorous.

Legs, coxæ and trochanters dull yellow, femora dull yellow, the tips broadly dark brown, tibiæ yellowish brown, the tips broadly darker brown, tarsi dark brown; the brown femoral and tibial apices are subequal in length on all the legs.

Wings hyaline, with a pale brown rounded stigma. Venation (see Plate xvi, fig. 3): *R*₃ long and almost straight.

Abdomen dark brownish black, the extreme apices of segments 1 to 6 indistinctly dull yellow; apical segments dull yellow, the base of the 7th tergite blackish.

Holotype, ♀, Coroico, Bolivia, in the Hungarian National Museum.

***Teucholabis jucunda*, sp. n. (Pl. XVI, Fig. 4).**

Head black; pronotum light yellow; mesonotum light yellow with dark brown spots; pleuræ with a large blotch; hind legs blackish; halteres dark throughout; wings brown with two large enclosed subhyaline blotches.

Female.—Length, 6 mm.; wing, 8.3 mm.

Rostrum and palpi black, the former elongated; antennæ dark brownish black; front, vertex and occiput black.

Pronotum elongate, conspicuous, light yellow. Mesonotal præscutum light reddish yellow or orange yellow, a shining brownish black triangular spot on the middle of the sclerite, its anterior end broadest, its apex directed caudad and becoming much paler behind, spreading out over this part of the sclerite, a large rounded dark brown spot on the sides of the sclerite behind; scutum, lobes dark brownish black, median line and margins of the sclerite reddish yellow; scutellum and postnotum yellowish. Pleuræ light dull yellow with a very large conspicuous brownish black mark on the mesopleuræ. Halteres brownish black throughout.

Legs, fore coxæ and trochanters yellowish, rest of fore legs missing; middle coxæ and trochanters brown, base of the femora yellowish brown soon passing into the dark brown of the tip, tibiæ and tarsi dark brown; hind coxæ and trochanters black, femora, tibiæ and tarsi dark brownish black.

Wings hyaline or subhyaline, with conspicuous brown markings on the tip, along the cord and sub-basal, so that of the ground color only the following remains: A large blotch distad of the cord extending from cell *2nd R1* caudad into cell *Cu1* including most of cell *1st M2*; the median blotch is irregular, embracing the middle of cells *R*, *M*, and *Cu* and the tips of the anal cells; the anal angle of the wing is pale. Venation (see Plate xvi, fig. 4): *Sc* long, *Sc1* ending nearer to the fork of *Rs* than to its origin.

Abdomen with three basal tergites dark brown, the remaining similar in color with broad pale yellowish brown apices; sternites dark brownish black with very broad yellowish apices to the sclerites except the apical segments which are uniformly dark; ovipositor, base blackish, tip yellowish.

Holotype, ♀, Callanga, Peru, in the Hungarian National Museum.

In my key to *Teucholabis* (Psyche, vol. 20, No. 1, pp. 43, 44, 1913) *jucunda* would run down to *pulchella* Alexander, from Eastern Brazil. From this species it differs in the increase in brown markings on the thorax and the much darker wing pattern. It is much more closely related to *T. laeta* described below.

***Teucholabis laeta*, sp. n. (Pl. XVI, Fig. 5).**

Head reddish brown; pronotum yellow; mesonotum reddish yellow with dark brown spots; pleuræ uniform; halteres dark throughout; wings with broad dark brown fasciæ, basal cells almost clear of dark color.

Male.—Length, about 4.1 mm.; wing, 5.3 mm.

Rostrum, palpi and antennæ dark brownish black. Front, vertex and occiput very deep reddish brown.

Pronotum yellow. Mesonotal præscutum rich reddish yellow with a large oval, median, dark brown blotch on the anterior portion of the sclerite, larger more rounded spots of the same color on the sides of the sclerite behind; scutum reddish, the lateral cephalic edge of the lobes with a brown blotch; scutellum and postnotum reddish yellow. Pleuræ uniform reddish yellow without black markings. Halteres uniformly dark color.

Legs, coxæ and trochanters dull yellow, fore femora with the basal third yellowish passing into dark brown, tibiæ base and tip dark, the intermediate portion somewhat lighter, yellowish; remaining femora with the dark tip narrower.

Wings subhyaline with the tip dark brown, a broad seam of the same

dark color along the cord, these two bands cutting off a large oval blotch of the ground color, base of the wing almost free from brown markings, except at the tips of the anal veins. Venation (see Plate xvi, fig. 5): *Sc* long, origin of *Rs* far before its tip.

Abdomen with the tergites dark shiny black, the fifth much paler, yellowish, basally and apically; sternites reddish yellow, uniform.

Holotype, ♂, Songo, Bolivia, in the Hungarian National Museum.

Closely allied to *jucunda* but much smaller, the thoracic coloration especially in the pleuræ different and wing-pattern and venational details quite distinct. It should be noted that in the genus *Teucholabis*, the males are invariably larger than the females, a condition that is quite different from what occurs in most crane flies.

Teucholabis hilaris, sp. n. (Pl. XVI, Fig. 6).

Head reddish; pronotum yellow; mesonotal præscutum yellow with three broad brown stripes confluent behind; scutellum yellow; posterior coxæ dark; wings hyaline with the tip infuscated.

Male.—Length, 5 mm.; wing, 5.5 mm. *Female*.—Length, 4 mm.; wing, 4.8-5 mm.

Rostrum and palpi brownish yellow; antennæ basal segment orange yellow, flagellum black; front, vertex and occiput orange yellow.

Pronotum conspicuous, rich orange yellow, very shiny. Mesonotal præscutum yellow with three very broad dark brown stripes which almost conceal the ground color, these stripes confluent behind near the transverse suture; scutum yellow, each lobe with a large dark brown rounded spot in the center; scutellum light yellow; postnotum brownish black. Pleuræ, propleuræ yellow; meso- and metapleuræ dark shining black. Halteres, stem brown, knob bright orange yellow.

Legs, fore and middle coxæ and trochanters light orange yellow, fore femora yellowish on basal fourth, remainder dark brown, tibiæ and tarsi brown, the former a little brighter medially; middle femora light yellow with a rather broad dark brown tip, tibiæ with the base and tip dark brown, the medial portion yellowish brown; tarsi dark brown; hind leg, coxæ and trochanters dark brownish black, femora light yellow with the tip broadly dark brown, tibiæ yellow with the base narrowly dark brown, the tip broadly of the same color, tarsi dark brownish black.

Wings, hyaline, the tip broadly infuscated with light brown; a dark brown basal spot in the region of the arculus; a dark brown triangular stigma which sends a narrow brown seam down along the cord to cell 1st *M*₂. Venation (see Plate xvi, fig. 6): Origin of *Rs* opposite *Sc*₂.

Abdomen dark brownish black, the extreme tergal apices yellow; sternites yellow with brownish black rings.

Female.—Similar, the ovipositor and a ring on the 8th abdominal segment, yellow.

Holotype, ♂, Callanga, Peru.

Allotype, ♀, Callanga, Peru.

Paratype, ♀, Callanga, Peru.

The two types in the Hungarian National Museum, the paratype in the author's collection.

This handsome species agrees most closely with *simplex* Wied. [Aussereur Zweifl. Ins., vol. 1, pp. 549, 550; (*Limnobia*)] but is much smaller, antennæ not yellowish brown and the leg-pattern quite different. From *molesta* O. S. (Biologia Cent. Amer.; vol. 1, pp. 6, 7), it differs in its reddish head; from *gracilis* O. S. (l. c., p. 7), it differs in its thoracic pattern and much smaller size.

***Teucholabis munda*, sp. n.** (Pl. XVI, Fig. 7).

Head dark brown above; pronotum yellow; thorax shiny black; wings hyaline with a broad brown apex and brown marks along the cord; *Rs* very short, arcuated, its origin opposite the tip of *Sc1*.

Male.—Length, 5.5 mm.; wing, 5.8 mm.

Rostrum yellow, palpi brown; antennæ with the basal segment yellow, remaining segments rounded oval, dark brownish, front yellowish, vertex and occiput very dark brown becoming lighter and brighter on the genæ.

Pronotum very light yellow, not very shining. Mesonotum entirely dark shiny black. Pleuræ black. Halteres, stem dark brownish black, the knob light yellow.

Legs, fore coxæ and trochanters light yellow, femora with the basal third yellowish darkening into brownish black apically, tibiæ and tarsi dark brownish black; middle coxæ brown, trochanters yellow, femora brownish yellow, the tip darker, tibiæ and tarsi dark brown; hind coxæ black, trochanters brownish yellow, femora brownish yellow gradually darkening to the brown tip, tibiæ and tarsi dark brownish black.

Wings subhyaline, the whole tip of the wing infuscated with light brown, the inner margin of this infuscation including the extreme tip of cell 1st *M2*; stigma large, dark brown, sending a narrow brown seam along the cord; an indistinct light brown suffusion in cell *M1*, and tips of the two anal cells. Venation (see Plate xvi, fig. 7): *Rs* short and very arcuated at its origin, its base opposite the tip of *Sc1*.

Abdomen with the tergites black, sternites black, the tips of the apical sclerites broadly yellowish.

Holotype, ♂, Callanga, Peru, in the Hungarian National Museum.

T. munda differs from all of the species known to me in the great arcuation of the radial sector.

***Teucholabis paradoxa*, sp. n.** (Pl. XVI, Fig. 8).

Head reddish brown; thorax reddish, unspotted; wings subhyaline with numerous brown spots and dots; cross vein *r-m* not present.

Male.—Length, 5 mm.; wing, 6.6 mm. *Female*.—Length, 6 mm.; wing, 6 mm.

Male and Female.—Rostrum reddish, palpi brown; antennæ dark brownish black throughout; front, vertex and occiput shining reddish brown.

Pronotum reddish. Mesonotum and pleuræ reddish yellow without dark markings. Halteres light brown throughout.

Legs, coxæ and trochanters brownish yellow, femora brownish yellow, the tip rather broadly dark brown, tibiæ brown darkest at the tip, tarsi dark brown; fore tibiæ almost uniformly dark brown; the dark femoral apices subequal on all the legs.

Wings, shiny, light yellowish hyaline, with numerous dark brown spots and dots as follows: Cell *C* is brown except for a space near cross vein *h*; *Sc*₂ brown with a space over the middle of cell 1st *R*₁. Four large brown blotches, one at the base of the wing, a second at the origin of *Rs*, a third near the stigma and the last at the end of *R*₁ in cell 2nd *R*₁. Anal angle of the wing dark, a large blotch in the end of cell 1st *A*; smaller blotches at the ends of the longitudinal veins; all of the cells of the wings with abundant rounded brown dots. Venation (see Plate xvi, fig. 8): *Sc* long, *Rs* rather long and rather strongly arcuated so that cell *R* is narrowest at its middle; cross vein *r-m* obliterated by the fusion of *R* 4 plus 5 on *M* 1 plus 2 at the proximal end of cell 1st *M*₂; cell 1st *M*₂ much longer than the veins issuing from it.

Abdomen, base yellowish, in the female tergites 2 to 5 light brown with dark apices; sternites brownish yellow; in the male, several of the basal tergites yellow, the abdomen expanded before the hypopygium, several segments being involved.

Holotype, ♂, Callanga, Peru.

Allotype, ♀, Callanga, Peru.

Types in the Hungarian National Museum.

The only species of *Teucholabis* that I know of with this type of wing-pattern. The obliteration of the *radio-median*

cross-vein by the fusion of *R* 4 plus 5 on *M* 1 plus 2, is a new venational feature for the genus although long known in the related genus *Paratropeza* Schiner.

Genus *Paratropeza* Schiner.

1866. *Paratropeza* Schiner; Verh. Zool. bot. Ges. Wien; vol. 16. p. 932.

A very interesting group of Neotropical crane flies remarkable in the presence of cell *R*2 in the wings, *Paratropeza* being the only genus in the tribe that possesses this character (compare my key to the Antochini, Psyche, vol. 20, No. 1; pp. 40, 41; 1913).

Key to the Species of *Paratropeza*.

1. Cross vein *r-m* obliterated by the fusion of *R* 4 plus 5 on *M* 1 plus 2 2
 Cross vein *r-m* present 4
2. Entire thorax blue black; [head dark purplish; wings with three dark brown bands, one near the wing base, one along the cord and the last on the wing tip; abdomen black, margins of the segments yellowish.] (Brazil, Peru). *collaris* O. S. (1)
 Thorax with at least the scutellum yellowish 3
3. Thoracic præscutum entirely shiny black; wings with a narrow brown seam along the radial cross vein; [head yellow; abdomen rust yellow except the base which is black.] (Colombia).
 singularis Schin. (2)
 Thoracic præscutum reddish yellow with three broad black stripes; wings with a narrow seam along the cord, tip of the wing faintly infuscated; [head reddish yellow.] (Mexico).
 præusta O. S. (3)
4. Cell 1st *M*2 of the wings open, due to the atrophy of the outer deflection of *M*3; wings with two distinct dark brownish bands; tip of the wing infuscated. (Brazil)... *fasciolaris* Wied. (4)
 Cell 1st *M*2 closed; wings with a narrow brown seam along the cord; tip of the wing not infuscated. (Brazil).
 jactans sp. n.

(1) Osten Sacken, Berl. Ent. Zeitschr.; vol. 31, p. 190 (1887).

(2) Schiner, Novara Reise, Dipt., p. 46, pl. 2, fig. 2 (1868). (Type of the genus).

(3) Osten Sacken, Biol. Cent. Amer., vol. 1, pt. 1, p. 8 (1886).

(4) Wiedemann, Ausser. Zweifl. Insect, vol. 1, suppl., p. 552, pl. 6b, fig. 11 (1828), (as *Linnobia*).

Paratropeza collaris Osten Sacken (Pl. XVI, Fig. 9).

One ♂, from Callanga, Peru. Venation (see Plate xvi, fig. 9); *Rs* very strongly arcuated at its origin; deflection of *R* 4 plus 5 and cross vein *r* almost in a line; cross vein *r-m* obliterated by the fusion of *R* 4 plus 5 on *M* 1 plus 2; basal deflection of *Cu*₁ just beyond the fork of *M*.

Paratropeza jactans, sp. n. (Pl. XVI, Fig. 10).

Thoracic præscutum yellowish with broad brown stripes; scutellum yellow; postnotum black; wings with a narrow brown seam along the cord; cross vein *r-m* present; cell 1st *M*₂ closed.

Male.—Length, 6 mm.; wing, 6.8 mm.

Rostrum yellow, palpi brown; antennæ with the basal segment brownish yellow, the remaining segments brown; front and vertex brown, darkest on the vertex; occiput reddish brown.

Pronotum yellowish brown. Mesonotal præscutum dull yellow with three broad dark brown stripes confluent behind, the median stripe broad, its sides subparallel, the lateral ones very large, occupying most of the caudo-lateral portions of the sclerite; scutum dull yellow, the lobes with a large rounded dark brown spot; scutellum dull yellow; postnotum dark brownish black. Pleuræ rich reddish yellow, this color including the sternum. Halteres brownish black, the knob light yellow.

Legs, coxæ and trochanters dull yellow, rest of the legs broken.

Wings broadest in the region of the cord, subhyaline with a broadly triangular dark brown stigma, a narrow brown seam along the cord and on the outer end of cell 1st *M*₂; an indistinct brown suffusion from the origin of *Rs* caudad across the wing to the tip of 2nd *A*. Venation (see Plate xvi, fig. 10): *Rs* long, very gently arcuated; deflection of *R* 4 plus 5 anterior to the cross vein *r*; cross vein *r-m* present, rather long; cell 1st *M*₂ closed; basal deflection of *Cu*₁ just beyond the fork of *M*.

Abdominal tergites dark brownish black with a broad yellowish apex to the sclerites; sternites yellowish.

Holotype, ♂, Theresopolis, Brazil, in the Hungarian National Museum.

Genus **Diotrepha** Osten Sacken.

1878. *Diotrepha* Osten Sacken; Cat. Dipt. N. Am.

Diotrepha omissinervis, sp. n. (Pl. XIV, Fig. 9).

Wings uniformly grey, *Sc* long, ending opposite the middle of *Rs*, tip of *R*₁ atrophied; femoral and tibial apicæ dark brown.

Female.—Length, 8.8 mm.; wing, 6 mm.; abdomen, 7.2 mm. Hind leg, femur, 5.8 mm.; tibia, 6.3 mm.; tarsus, 4.6 mm.

Rostrum and palpi dark brown; antennæ with the two basal seg-

ments dark brown, the flagellar segments much paler, whitish; front, vertex and occiput light greyish brown, darker behind.

Mesonotal præscutum light brown, unmarked; scutum, scutellum and postnotum of about the same color, the latter a little darker. Pleuræ uniformly brown. Halteres brown, the base of the stem paler.

Legs, coxæ and trochanters dull yellow, femora almost white with the tip broadly dark brown, tibiæ whitish with the tip very narrowly dark brown; tarsi whitish, the two terminal segments becoming more infuscated.

Wings with a grey suffusion, veins rather pale. Venation (see Plate xiv, fig. 9): *Sc* long, ending about opposite the middle of *Rs*, *Sc2* at its extreme tip, the terminal portion of *R1* beyond the cross vein *r*, atrophied.

Abdomen long, uniform dark brown, the sternites rather brighter.

Holotype, ♀, Songo, Bolivia, in the Hungarian National Museum.

From *mirabilis* Osten Sacken (1), the only described species with dark femoral and tibial apices, this species differs as follows: *Sc* much longer, ending near the middle of *Rs* instead of just beyond its origin; the atrophy of the tip of *R1* distinguishes *omissinervis* from all of the described forms.

Genus *Toxorhina* Loew.

1851. *Toxorhina* Loew.; Linnæa Entomologica, vol. 5, p. 400.

Toxorhina brasiliensis Westwood.

One ♀ from San Bernadino, Paraguay. Fiebrig, 1908.

Genus *Atarba* Osten Sacken.

1869. *Atarba* Osten Sacken; Monographs of the Dipt. of N. Am., vol. 4, pp. 127, 128.

Atarba varicornis, sp. n. (Pl. XIV, Fig. 10).

Antennæ very long, annulated dark brown and yellowish; femora unicolorous; wings without a stigmal spot; valves of the ovipositor very powerful; abdominal tergites dark brown.

Female.—Length, 4.2 mm.; wing, 4.9 mm.

Rostrum yellowish, the palpi a little darker; antennæ with the scapal segments dull yellow, flagellum with the basal half of each segment light yellow, the apical half abruptly dark brown, the terminal two or three segments uniformly brown; front and occiput dull brownish yellow, the vertex a little darker brown.

(1) Osten Sacken, Cat. Dipt. N. Am., p. 220 (1878); Williston, Trans. Ent. Soc. Lond., pt. 3, p. 291, fig. 65 (1896).

